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ABSTRACT

The report presents the results of a pilot test of a procedure for conducting a school-directed assessment of former high school students to obtain information about their educational and employment activities. Criteria for the assessment procedure were: provide information useful in assisting local school personnel in planning and evaluation; be directed, conducted, and financed by the local school; include all school leavers; provide information about educational and employment activities of former students; produce a high response rate; keep cost reasonable; provide information simplifying future assessment of the same students; and provide consistent information across schools. At school leaving, students were asked for name, address, parents' address and phone, special needs, and their educational program during high school. At the time of assessment they were asked for an employment and educational activities history since leaving high school and a description of their present educational and employment status. Mailed questionnaires yielded three types of responses: non-respondent, incomplete, and complete. The procedure was evaluated by conducting a pilot test in six Minnesota school districts. In general, the assessment procedure was found to have met each of the criteria. Suggestions for revising the procedure and its administration are proposed in conclusion. (AG)

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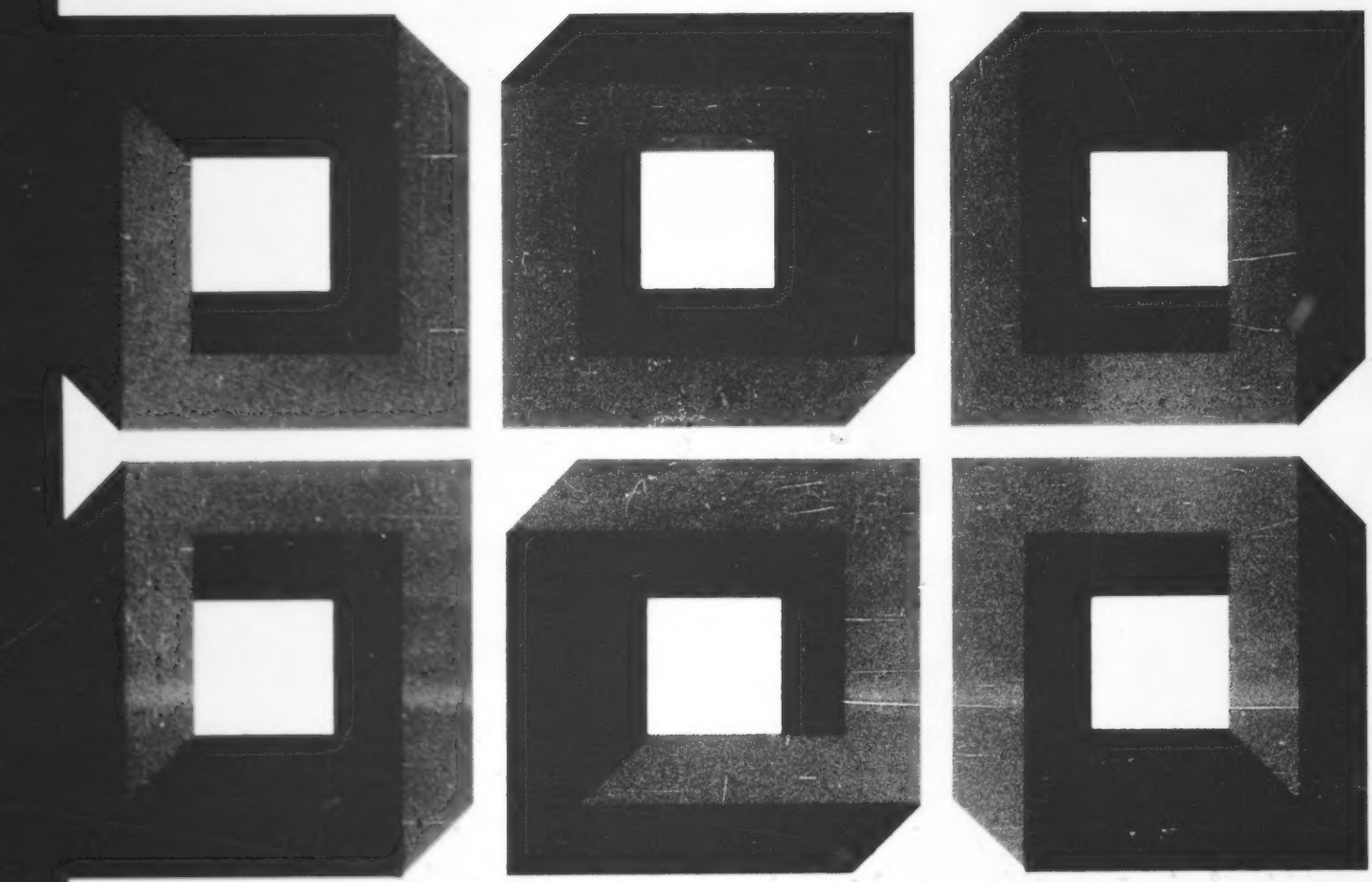
Status of Former High School Students: Procedure for Local Assessment

Report of the First Pilot Test



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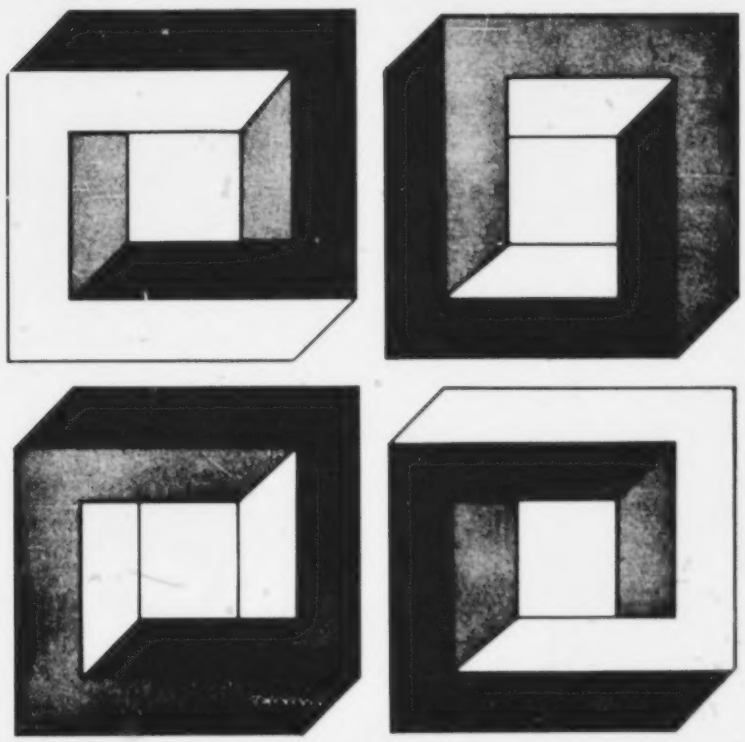
Status of Former High School Students: Procedure for Local Assessment

Report of the First Pilot Test

by George Copa and Donald Irvin



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August, 1973

PREFACE

The research project reported in this publication had as its purpose to develop and pilot test a feasible procedure for assessing the educational and employment activities of former high school students. Feasibility was defined in terms of validity and reliability, usefulness, and cost of the information collected. Using these feasibility criteria, the procedure was designed to be initiated, directed, and largely conducted by a school wishing an assessment of its former students. The procedure consists of a set of data collection forms, a "cookbook" for conducting the assessment, and a computer program to summarize the information for school use.

The authors wish to acknowledge the assistance of persons in the Minnesota State Department of Education, particularly the Division of Vocational-Technical Education, Program Planning and Development Section and Secondary Vocational Education Programs in delineating the information to be gathered and developing the assessment procedure. Also, the "on site" testing of the procedure would not have been possible without the cooperation of those directing the assessment procedure in the schools doing the pilot testing: David Cook and Howard Kortmeyer, Guidance Counselors, Anoka School System; William Warner, Director of Vocational Education, Stillwater School System; and Donald Frederick, Director, Southern Minnesota Vocational Center, involving Alden-Conger, Freeborn, Kiesler-Walters and Wells-Easton School Systems.

Hopefully, the procedure reported will serve as a useful aid to local schools in compiling a more complete set of information on which to base educational programming decisions. At the present time, the procedure is being revised, where necessary, based on the findings of the first set of pilot tests and will again be tested during the 1973-74 school year.

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CHAPTER I

PURPOSE AND CRITERIA FOR LOCAL ASSESSMENT

Assuming that education at the high school level is a means to an end rather than an end in itself for students, persons involved with this level of education must be able to identify common student ends or outcomes. This information is one prerequisite to planning an effective and efficient educational program. Two important ends for high school leavers are further education and/or employment. Therefore, it seems apparent that information on the type and location of education and/or employment pursued by school leavers is an essential input into planning and evaluating high school programs. This report presents the results of a pilot test of a procedure for conducting a school directed assessment of former high school students to obtain information about their educational and employment activities.

Uses of the Information

The information on the educational and employment status of former students can be useful to several groups of decision makers concerned with high school programs. For example, administrators, teachers and guidance personnel can use the information as (1) documentation of what happens to their students after leaving high school, (2) as a source of information for planning the school curriculum and (3) as information to accurately complete local, state and federal reports to insure accountability.

In combination with knowledge about the educational program pursued by former students, the information can also prove useful to students and parents in (1) deciding the combination of courses which will be taken in high school and (2) making decisions relative to activities to be retained or changed in the local high school.

By summarizing follow-up information from the several local school districts in the State, State Department of Education officials can use the information to assist in documenting the effect of state and federal monies spent on high school programs by identifying the numbers of persons who pursue various types of employment and/or further education.

Criteria for Assessment Procedure

In order for the assessment procedure to function effectively in providing information about former high school students, it was judged that several criteria would have to be met. The criteria and their justifications were as follows:

1. Provide information useful in assisting local school personnel in planning and evaluation	-- Local school personnel are the closest and have the most specific control over school programs
2. Largely directed, conducted and financed by local school	-- Insured that the information collected is useful and worth the expense
	-- The large size of the population to be assessed and the number of schools involved makes a centralized system difficult to manage
3. Include all school leavers	-- Educational programs at the high school level must be available to all students
	-- There are many interactions between programs taken by students with differing educational and employment goals
4. Provide valid and reliable "status" information about educational and employment activities of former students	-- Employment and further education are the most common student activities (ends) following high school.
	-- Status information serves as baseline for identifying subgroups requiring further study
	-- More feasible to get agreement within and between schools on "status" as compared to "attitudinal" information
5. Produce a high rate of response from former students	-- Needed to insure valid and reliable information
	-- Low return would require additional procedures to validate the information
6. Reasonable cost	-- Feasibility of implementation by local school would be enhanced by lower cost
7. Supply information which would simplify future assessment of same students	-- Since only "status" information is collected, future assessments asking other kinds of information or dealing with particular subgroups may be necessary
8. Provide consistent information across schools	-- Necessary if information is to be aggregated among schools within districts and districts within the State

Using these criteria for guidance, a set of procedures and materials were developed to accomplish the task of providing status information on former high school students. During development, advice was solicited from personnel in several local school districts and the State Department of Education in Minnesota.

CHAPTER II

DATA GATHERING FORMS

Given the criteria specified for the procedure, the first task involved was the development of information gathering forms. Five of the previously given criteria were of primary concern during this development. These criteria were: (1) provide information useful in assisting local school personnel in planning and evaluating, (2) provide valid and reliable "status" information on educational and employment activities, (3) produce a high rate of response from former students (80%), (4) supply information which would simplify future assessments of the same students and (5) provide consistent information across schools.

Information to be Collected

In order to design forms which would gather useful information, it was first necessary to identify the types of data about the educational and employment activities of former students which would be helpful for program planning and evaluation. Local school personnel and individuals in the Division of Vocational and Technical Education of the State Department of Education were asked for their suggestions about types of data which might be appropriate. In addition, a review of existing literature was conducted to help identify procedures and materials which had been used in the past (see selected bibliography in Appendix I). The consultations and review of literature resulted in the following categories of information to be gathered:

1. At school leaving

   Student's name
   Student's address
   Parents' address
   Parents' telephone number
   Special needs (disadvantaged, handicapped)
   Educational program during high school

2. At time of assessment

   Name
   Address
   Telephone number
   Social security number
   Brief history of employment and educational activities since leaving high school
   Present employment status and description
   Present educational status and description

These categories of information were then used in developing data gathering forms. Two separate forms were developed. The first, designated as the Base Information Form (BIF), was used to gather information describing the former students at the time they left school (as listed in category 1 above). The second was the Follow Up Questionnaire which enabled the collection of information about the status of former students at some time after leaving school (as listed in category 2 above).

Base Information Form

As stated above, the basic purpose of the Base Information Form was to allow collection of information on the status of students at the time they left school. In so doing, this form identified the students who would later be assessed. The BIF was also used to document the steps in completing the assessment procedure for each former student. A copy of the BIF is shown as Exhibit I. The remainder of this section contains a detailed description of this form.

The top section of the Base Information Form was completed using existing school records. The boxes in the upper right hand corner of the BIS were used for identifying the student and his school.

As can be seen in the sample BIF, Items 1, 2 and 3 collect the student's name, address and telephone number respectively. This information provided preliminary means to contact the former student.

Items 4, 5 and 6 on the BIF collected the names and addresses and phone numbers of the student's parents or guardians. This data provided an alternative address to which questionnaires could be sent in an attempt to contact the student.

Item 7 also provided an alternate address, either for the student or for another person, which could be used in an attempt to contact the student.

Item 8, Entrance Status, was included to allow a school to obtain data relative to the number of students who completed all or part of their secondary education at that school. The categories of entrance for a student were: (1) entered 10th grade and (2) entered after 10th grade. The "entered 10th grade" category identified a student whose entire secondary education was at the school involved, while the "entered after 10th grade" category identified students who entered the school after the 10th grade and therefore had input from more than one school in their secondary education.

Item 9, Exit Status, was developed to describe the status of the student at the time of school leaving. The alternatives listed in Item 9 were defined as follows:

(1) Graduate - the student completed his educational program and received a diploma

EXHIBIT 1. Base Information Form

School Student

1 | | | | | | |

1 2 3 4 5 6 7

SECONDARY SCHOOL FOLLOW-UP PROJECT
(Form 2)
Base Information

1. Student Name: _____ (Last) (First) (Middle)

2. Student Address: _____ (Street or Rural Route)
_____ (City) (State) (Zip Code)

3. Students Telephone Number: _____ (Area Code) (Number)

4. Parents' Name: _____

5. Parents' or Guardian's Address: _____ (Street or Rural Route)
_____ (City) (State) (Zip Code)

6. Parents' or Guardian's Telephone Number: _____ (Area Code) (Number)

7. Other Contacts (i.e., other relative, friend, emergency number) or More Current Student Address:
_____
_____

8. Entrance Status: [8] (1) Entered 10th grade (2) Entered after 10th grade

9. Exit Status: [9] (1) Graduate (2) Transfer [10] (3) Dropout (4) Other

10. Sex: [10] (1) Male (2) Female

11. State Education Program: [11] (1) Combination
(2) Non-Vocational
(3) Vocational

12. Vocational OE Cluster Code: [12][13] [14][15][16][17][18][19][20]

13. Local Educational Program: [21] (1) Combination
(2) Non-Vocational
(3) Vocational

13. (cont.) Vocational Program Code: [22][23][24][25]

14. Special Interest Groups: 1 ([26]) 2 ([27]) 3 ([28]) 4 ([29]) 5 ([30])

15. Special Needs: [31] ( ) Handicapped [32] ( ) Disadvantaged

---

Follow-Up Procedure Status

Base Information Collected: [33] ( ) Exit Form

First Questionnaire: [35] ( ) Mailed _____ (Date)

Returned by Post Office: [37] ( ) _____ (Date)

Second Questionnaire: [39] ( ) Mailed _____ (Date)

Non-Respondent Called: [41] ( ) _____ (Date)

Incomplete Questionnaire called: [42] ( ) _____ (Date)

No Return Received: [43] ( )

Return Too Incomplete to Use: [44] ( )

[34] ( ) P.R.C.

[36] ( ) Returned _____ (Date) ( ) Complete

[38] ( ) Remailed _____ (Date)

[40] ( ) Returned _____ (Date) ( ) Complete

Remarks: _____
_____
_____

(2) Transfer - the student left the school but continued his secondary education at another school

(3) Dropout - the student left the school without receiving a diploma and did not continue his education at another school

(4) Other - the student left the school but did not receive a diploma or transfer to another school and was not considered a dropout

Item 10, Sex, was included in order to obtain summary data by sex. Such analysis, by sex, provided useful comparisons for subsequent school planning and was required for many state and federal reports.

Item 11 on the BIF, State Education Program, was developed to summarize data for completing state and federal reports concerning reimbursed vocational education programs. The students were classified according to their enrollment in state reimbursed vocational education programs. The categories were:

(1) Combination - the elective courses taken by the student in grades 11 and 12 were primarily non-vocational but at least one course taken was a reimbursed vocational education course

(2) Non-Vocational - the student took no reimbursed vocational education courses during either grade 11 or grade 12

(3) Vocational - the majority of the elective courses taken by the student during grades 11 or 12 were reimbursed vocational education courses

Note, for Item 11 a course is considered vocational if, and only if, reimbursement is received in compliance with the Minnesota State Plan for Vocational Education.

If in Item 11 the student's program was categorized as combination or vocational, the type of program was further identified by program cluster. The clusters were defined by the State Department of Education. Students were classified into the cluster in which they had taken the most courses or in the case of a tie, the most recent area studied.

Item 13 on the BIF was included for the purpose of obtaining summary data about the student's high school program as defined by the local school without regard for reimbursement. The Local Education Programs were defined as follows:

(1) Combination - the elective courses taken by the student in grades 11 and 12 were primarily non-vocational but at least one course taken during grade 11 or 12 was a vocational education course as defined by the school

(2) Non-Vocational - the student took no vocational education courses as defined by the school

(3) Vocational - the majority of the elective courses taken by the student in grade 11 or 12 were vocational education courses as defined by the school

If the student was enrolled in either a combination or vocational program, they were further coded by program code in Item 13 (cont.). These program codes represented vocational program areas as defined by the school. Students were classified into the program area where they took the most courses or, in the case of tie, the area most recently studied.

As an example, a difference in coding between Item 11 and Item 13 might occur when the local school identified its industrial arts program as vocational even though no vocational education reimbursement is received from the State. This item allows flexibility in the classification of programs which would prove most useful in local program planning.

In response to the requests of local school personnel, Item 14 was developed to obtain information about the former students' membership in special interest groups (i.e. upper 1/4 of class, science oriented program, work-study program).

Item 15, special needs, was included on the BIF so students who were handicapped and/or disadvantaged as defined by the school could be identified.

As previously stated, the data required to complete items 1 through 15 were to be obtained from existing school records such as Permanent Record Cards. The lower portion of the BIF provided a method of keeping track of the steps in the assessment procedures for a given student.

Follow-Up Questionnaire

The second form developed for use in the assessment procedure was designed to gather educational and employment information about the former student. A copy of this form appears as Exhibit II.

In light of the previously stated criteria, the questionnaire was designed to take advantage of known questionnaire characteristics which facilitated information gathering and maximized response. Examples of these characteristics included (1) items with low threat, (2) appealing color of paper on which the questionnaire was printed, (3) ease of completion and (4) reading level of questions.

The information needed from the former students may be classified into four categories: (1) identifying information, (2) recent history information, (3) present educational activity information and (4) present employment activity information. A brief explanation of each item is given below by item number as they appear on the questionnaire.

Items numbered 1 and 2 collect the following information: (1) name, (2) social security number, (3) present address and (4) present telephone number.

1 2 3 4 5 6 7
[2][ ][ ][ ][ ][ ][ ]

EXHIBIT II. Follow Up Questionnaire

RCU 22273

SECONDARY SCHOOL FOLLOW-UP QUESTIONNAIRE

PLEASE COMPLETE AND RETURN THE FORM BELOW.

1. Name: _____ (_____) Social Security No. _____ - _____ - _____
(Last) (First) (Middle Initial) (Maiden)

2. Present Address: _____ Phone: _____
(Street or R.R.) (Area Code) (Number)

_____
(City) (State) (Zip Code)

3. **Recent History:** For each time period (column) in the YEAR FOLLOWING HIGH SCHOOL, check (✓) the activity or activities in which you were involved. Check *at least* one activity for each column. Note that you may respond to *both* the employment and education sections if they both apply.

—Fold Here—

Activity	*Time Periods* Sept thru Nov	Dec thru Feb	Present (Complete even if same Activity as other time period)
Education:			
3.1 Vocational School	8 ( )	( )	( )
3.2 Junior College	11 ( )	( )	( )
3.3 College or University	14 ( )	( )	( ) → If you marked here, *complete* **#4** below.
3.4 Apprenticeship	17 ( )	( )	( )
3.5 Other Education _____ (Specify)	20 ( )	( )	( )
Employment:			
3.6 Unemployed (looking for work)	23 ( )	( )	( )
3.7 Homemaker	26 ( )	( )	( )
3.8 Military (full time)	29 ( )	( )	( )
3.9 Paid Employment	32 ( )	( )	( ) → If you marked here, *complete* **#5** below.
Other Activity: (For example: ill, vacation, etc.)			
3.10 _____ (Specify)	35 ( )	( )	( )

4. Present Educational Activity

38 [ ] 4.1 Hours Per Week You Attend:
1. 1 to 12 ( )
2. 13 to 18 ( )
3. 19 or more ( )

4.2 School Name: _____

39 [ ][ ] 4.3 School Address: _____
(City) (State)

41 [ ] 4.4 Type of School: 1. Public ( ) 2. Private ( )

4.5 Major Area or Program:

_____
(For example: Auto Mechanic, Elementary Teaching)

42 [ ] 4.6 Intended occupation after completing education

_____
(For example: Legal Secretary, Carpenter, Teacher, undecided, etc.)

5. Present Employment Activity

5.1 Hours Per Week You Work: [ ] 43
1. Less than 30 ( )
2. 30 or more ( )

5.2 Job Title: _____ [ ] 44
(For example: Truck Driver, Secretary)

5.3 Employer: _____ [ ][ ] 45

_____
(Company or Business name)
(If self employed, write "self.")

5.4 Employer's Address: _____
(Street or R.R.)

_____ [ ][ ] 47
(City) (State)

5.5 Kind of Business: _____ [ ][ ] 49

_____
(For example: Farming, Retail Shoe Store)

5.6 Supervisor's Name: _____

THANK YOU FOR YOUR HELP

Please Fold, then Staple or Tape and Place in Return Mail. No Stamp Is Required.

This information was collected primarily to identify students for future reference. The student's name may have changed as a result of marriage, for example, and the social security number provides a means for keeping all students separate in future studies.

Item 3 requested information describing the kinds of activities engaged in by former students since leaving school. As seen in Exhibit II, Item 3 was subdivided into three broad categories of activities: (1) education, (2) employment and (3) other activity. The respondent was asked to check each of the activities appropriate to him/her for each of three time periods (September through November, December through February and Present for those being assessed one year after leaving school). An individual could be in more than one activity during the time period. These time periods were chosen in order to obtain information on the types of activity changes made by the students during the time after leaving high school.[1]

Item 4 was to be completed only if the respondent checked one of the education activities in the present activity column. This item was developed to obtain specific information about the educational activity in which the student was involved at the time of the follow-up. Item 4.1, for example, was designed to determine whether or not the respondent was a part-time or full-time student and items 4.2, 4.3 and 4.4 were designed to obtain information about the name, location and type of financing of the educational institution attended, respectively. Items 4.5 and 4.6 requested the respondent to identify his present area of study and intended occupation after completion of education, respectively. Information from these two items formed a basis for determining the degree of relatedness between post high school and high school education programs.

Item number 5, Present Employment Activity, was to be completed only if the respondent checked Item 3.9, Paid Employment, in the present activity column. The primary purpose of this item was to identify the post high school employment activities of high school leavers. Within Item 5, Item 5.1 requests information about part-time or full-time employment. Item 5.2, Job Title, was included to determine the relatedness of the respondent's occupation to his high school program. In addition, this job title provided a means for classifying the respondent by occupational category. Items 5.3 and 5.4 requested information about the name and location of the respondent's employer. This information was desired to establish location (geographic mobility) and to provide a reference address should subsequent studies involving employers be conducted. Item 5.5, Kind of Business, was used to classify respondents by industry. In addition, information from this item, in combination with Item 5.2, permits an industry by occupation cross-classification of the respondent's employment activity. Item 5.6, Supervisor's Name, was included on the questionnaire to provide the name of a person who, if it was desired later, could be contacted for more information about the former student or his job.

---

[1] One of the schools pilot testing the assessment procedure also elected to follow up former students three years after leaving school. In this case the time periods were changed to During 1971, During 1972, and Present.

The light grey boxes in the upper left corner of the questionnaire were used for an identification number as was explained in the section describing the Base Information Form. The grey boxes to the left of Items 4.1 through 5.5 were used for coding purposes required for data processing. Each form was set up to be keypunched directly from the form thus eliminating the step of using coding sheets.

CHAPTER III

ASSESSMENT PROCEDURE

The second task involved in the collection of information from high school leavers was the development of a procedure by which the data would be gathered, organized and processed into a form useful to local program planners.

The primary concerns at this stage were that the procedure would: (1) provide valid and reliable "status" information about educational and employment activities of former students, (2) include all school leavers, (3) produce a high rate of response, (4) be largely directed, conducted and financed by local school and (5) be conducted at a reasonable cost. To meet these criteria, an eight stage procedure was developed. Each of these stages was developed and placed in a procedures manual which was used to guide the local school in the conduct of the assessment.[2] In order to meet the criteria of low cost, the manual was designed to be self-instructional to clerical staff at the local school with minimum supervision from administrative or teaching personnel. An explanation of each of the eight stages is presented below.

Stage 1: Collecting Base Information

Stage 1 of the procedures manual explained the method used to identify the population to be followed-up. This involved securing a list of graduates, drop-outs and other individuals who left the school during the preceeding year.

Another step involved identifying locally and state defined education programs in light of guidelines supplied to the local school.

A third step in stage 1 involved the collection of baseline information on each student. This information was gathered from permanent records at the school and placed onto the Base Information Form previously described. Once completed, these BIF sheets were filed in 3-ring binders and become a primary reference for later stages of the procedure.

Stage 2: Preparation and Mailing

The method of data collection decided upon was a mailed questionnaire. The second stage of the procedures manual provided directions for the preparation and mailing of materials to each individual to be assessed. This section identified materials required, suggested a format for the cover letter and provided guidelines for efficient preparation of the materials for mailing.

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[2] Secondary School Follow-Up Project Procedures Manual, Minnesota Research Coordinating Unit for Vocational Education, University of Minnesota, 1972 (presently under revision).

Stage 3: Questionnaire Return

The third stage of the procedures manual presented directions for the handling of returned questionnaires. A "filing system" was described which allowed for accurate and efficient handling of the returned questionnaires to prevent loss or damage.

Stage 4: Non-Respondents

The primary purpose of the fourth stage of the procedures manual was to provide direction for obtaining data from those individuals who did not respond to the first questionnaire. The process described in this stage was a two step process. Directions were given first for the preparation and mailing of a second questionnaire to all individuals not responding to the first questionnaire. The second step provided directions for contacting all non-respondents by telephone.

Stage 5: Coding

This stage of the procedures manual presented guidelines and directions for the coding of the information on the Base Information Form and Follow-Up Questionnaire. Accurate coding was required if the data were to be summarized by computer. The following items were coded:

(1) Extent of present education (part or full-time)
(2) Education location (by economic region in Minnesota and out of state)
(3) Relatedness of high school program to present education
(4) Extent of present employment (part or full-time)
(5) Relatedness of high school program to present employment
(6) Employment location (by economic region in Minnesota and out of state)
(7) Occupational category
(8) Industrial category

Stage 6: Preparation for Data Summarizing

Directions were presented in stage 6 for the preparation of the forms for data analysis. Different preparation procedures were explained dependent on the method of data analysis to be used: computer analysis or hand analysis.

Stage 7: Hand Summarizing

This stage of the procedure was designed to be used where hand analysis would be more efficient and/or economical than computer analysis. This might be the case in schools where the assessment population is less than 200 former students. A complete set of directions for accurate hand analysis of the information was presented in this stage.

Stage 8: Data Reports

Stage 8 of the procedures manual extended the hand analysis presented in stage 7 to the preparation of final reports. Directions were presented by which the local school clerical staff could organize the data into a final set of summary tables which would be useful to local program planners. If the school chose, summary tables were generated by the computer. Examples of these tables are shown in Exhibit III. Only summary information is presented in the tables. For more detailed information about a particular group (i.e. name of school being attended, major area of study, present job title, present employer and employment supervisor) the school could refer to the original data collection forms. A description of possible subgroups for which tables could be prepared is given in Appendix II. The remaining portion of this section contains a detailed explanation of the summary tables.

Introductory Information

The set of summary tables for each group or subgroup of former students is composed of three pages. (A sample of the full set is shown in Exhibit III.) The top of each page contained the name of the school, date of report and the name of the group being summarized. For groups defined by O.E. clusters, locally defined vocational education programs, and special interest groups the code for the group assigned by the local school was also presented.

Questionnaire Response

The responses to the assessment study were classified into three groups: non-respondent, incomplete respondent, and complete respondent. Non-respondents were those who were unable to be contacted or refused to complete a questionnaire. Incomplete respondents were those who returned the questionnaire but the questionnaire was incomplete and the respondent could not be contacted to obtain more complete information. For each group, respondents were divided into male and female--the total in each category was presented as well as the total for all categories.

EXHIBIT III. Summary Tables

SECONDARY SCHOOL FOLLOW-UP PROJECT -- School Name -- 05/30/73

-- Name of Group --

QUESTIONNAIRE RESPONSE:	MALE	FEMALE	TOTAL
NON-RESPONDENT	34	2	36
INCOMPLETE RESPONDENT	1	--	1
COMPLETE RESPONDENT	337	13	350
TOTAL	372	15	387

PRESENT EMPLOYMENT ACTIVITY:	MALE	FEMALE	TOTAL
UNEMPLOYED	27	1	28
HOMEMAKER	--	1	1
MILITARY (FULL TIME)	47	--	47
PAID EMPLOYMENT:			
TIME STATUS: FULL TIME	205	4	209
PART TIME	35	6	41
RELATEDNESS: RELATED	119	4	123
UNRELATED	120	6	126
LOCATION: MINNESOTA ECONOMIC REGION 01	--	--	--
MINNESOTA ECONOMIC REGION 02	--	--	--
MINNESOTA ECONOMIC REGION 03	--	--	--
MINNESOTA ECONOMIC REGION 04	1	--	1
MINNESOTA ECONOMIC REGION 05	--	--	--
MINNESOTA ECONOMIC REGION 06	1	--	1
MINNESOTA ECONOMIC REGION 07	--	--	--
MINNESOTA ECONOMIC REGION 08	--	--	--
MINNESOTA ECONOMIC REGION 09	--	--	--
MINNESOTA ECONOMIC REGION 10	1	--	1
MINNESOTA ECONOMIC REGION 11	231	10	241
OUT-OF-STATE	6	--	6

PRESENT EDUCATIONAL ACTIVITY:	MALE	FEMALE	TOTAL
TYPE OF EDUCATION: VOCATIONAL SCHOOL	44	1	45
JUNIOR COLLEGE	28	2	30
COLLEGE OR UNIVERSITY	17	1	18
APPRENTICESHIP	5	--	5
OTHER EDUCATION	8	2	10
RELATEDNESS: RELATED	59	4	63
UNRELATED	32	2	34
TIME STATUS: FULL TIME	80	6	86
PART TIME	15	--	15
TYPE OF SCHOOL: PUBLIC	80	4	84
PRIVATE	15	2	17
LOCATION: MINNESOTA ECONOMIC REGION 01	--	--	--
MINNESOTA ECONOMIC REGION 02	1	--	1
MINNESOTA ECONOMIC REGION 03	--	--	--
MINNESOTA ECONOMIC REGION 04	2	1	3
MINNESOTA ECONOMIC REGION 05	--	--	--
MINNESOTA ECONOMIC REGION 06	--	--	--
MINNESOTA ECONOMIC REGION 07	1	--	1
MINNESOTA ECONOMIC REGION 08	--	--	--
MINNESOTA ECONOMIC REGION 09	1	--	1
MINNESOTA ECONOMIC REGION 10	1	--	1
MINNESOTA ECONOMIC REGION 11	85	5	90
OUT-OF-STATE	4	--	4

OTHER ACTIVITY:	MALE	FEMALE	TOTAL
(I.E. ILL, VACATION)	3	--	3

EXHIBIT III continued - Summary Tables

SECONDARY SCHOOL FOLLOW-UP PROJECT -- School Name -- 05/30/73

-- Name of Group --

PRESENT JOB: -- OCCUPATION --

-- TYPE OF INDUSTRY --	PROFESS.	MANAGERS.	SALES...	CLERICAL.	CRAFTSMEN	OPERATIVE	LABORERS.	FARMERS..	SERVICE..	TOTAL...
MALE										
AG.,FISH.,FOREST.....	-	-	-	-	2	-	-	1	-	3
MINING.....	-	-	-	-	-	-	-	-	-	-
CONSTRUCTION.....	-	-	-	-	20	4	6	-	-	30
MANUFACTURING.....	-	-	-	6	29	64	3	1	3	106
TRAN/COMM/PUB.UT.....	-	-	-	-	3	8	4	-	1	16
WHSLE/RETAIL TRADE...	-	10	6	15	6	16	3	1	8	65
FIN.,INS.,REAL EST...	-	-	-	-	-	-	-	-	-	-
BUS/REPAIR SERVICE...	-	-	-	-	4	1	-	-	1	6
PERSONAL SERVICE.....	1	-	-	1	1	-	-	-	-	3
ENTERTAIN/REC.....	-	-	-	-	1	-	-	-	2	3
PROF/RELATED SERV....	-	-	-	1	-	1	1	-	3	6
PUBLIC ADM. SERVICE..	1	-	-	1	-	-	-	-	-	2
TOTAL.....	2	10	6	24	66	94	17	3	18	240
FEMALE										
AG., FISH., FOREST...	-	-	-	-	-	-	-	-	-	-
MINING.....	-	-	-	-	-	-	-	-	-	-
CONSTRUCTION.....	-	-	-	-	-	-	-	-	-	-
MANUFACTURING.....	-	-	-	-	-	-	-	-	-	-
TRAN/COMM/PUB.UT.....	-	-	-	-	-	-	-	-	-	-
WHSLE/RETAIL TRADE...	-	-	-	1	-	-	-	-	1	2
FIN.,INS.,REAL EST...	-	-	-	-	-	-	-	-	-	-
BUS/REPAIR SERVICE...	-	-	-	-	-	-	-	-	-	-
PERSONAL SERVICE.....	-	1	1	-	-	-	-	-	4	6
ENTERTAIN/REC.....	2	-	-	-	-	-	-	-	-	2
PROF/RELATED SERV....	-	-	-	-	-	-	-	-	-	-
PUBLIC ADM. SERVICE..	-	-	-	-	-	-	-	-	-	-
TOTAL.....	2	1	1	1	-	-	-	-	5	10
TOTAL										
AG.,FISH.,FOREST.....	-	-	-	-	2	-	-	1	-	3
MINING.....	-	-	-	-	-	-	-	-	-	-
CONSTRUCTION.....	-	-	-	-	20	4	6	-	-	30
MANUFACTURING.....	-	-	-	6	29	64	3	1	3	106
TRAN/COMM/PUB.UT.....	-	-	-	-	3	8	4	-	1	16
WHSLE/RETAIL TRADE...	-	10	6	16	6	16	3	1	9	67
FIN.,INS.,REAL EST...	-	-	-	-	-	-	-	-	-	-
BUS/REPAIR SERVICE...	-	-	-	-	4	1	-	-	1	6
PERSONAL SERVICE.....	1	1	1	1	1	-	-	-	4	9
ENTERTAIN/REC.....	2	-	-	-	1	-	-	-	2	5
PROF/RELATED SERV....	-	-	-	1	-	1	1	-	3	6
PUBLIC ADM. SERVICE..	1	-	-	1	-	-	-	-	-	2
TOTAL.....	4	11	7	25	66	94	17	3	23	250

EXHIBIT III continued - Summary Tables

SECONDARY SCHOOL FOLLOW-UP PROJECT -- School Name -- 05/30/73

-- Name of Group --

RECENT HISTORY: MALE

ACTIVITY	FIRST PERIOD	SECOND PERIOD	AT PRESENT
UNEMPLOYED	36	26	27
HOMEMAKER	-	-	-
MILITARY	38	48	47
PAID EMPLOYMENT	217	235	240
VOCATIONAL SCHOOL	48	45	44
JUNIOR COLLEGE	41	34	28
COLLEGE OR UNIVERSITY	18	16	17
APPRENTICESHIP	4	3	5
OTHER EDUCATION	7	9	8
OTHER ACTIVITY	2	3	3

RECENT HISTORY: FEMALE

ACTIVITY	FIRST PERIOD	SECOND PERIOD	AT PRESENT
UNEMPLOYED	-	2	1
HOMEMAKER	1	1	1
MILITARY	-	-	-
PAID EMPLOYMENT	7	8	10
VOCATIONAL SCHOOL	1	1	1
JUNIOR COLLEGE	3	2	2
COLLEGE OR UNIVERSITY	1	1	1
APPRENTICESHIP	1	-	-
OTHER EDUCATION	3	2	2
OTHER ACTIVITY	-	2	-

RECENT HISTORY: TOTAL

ACTIVITY	FIRST PERIOD	SECOND PERIOD	AT PRESENT
UNEMPLOYED	36	28	28
HOMEMAKER	1	1	1
MILITARY	38	48	47
PAID EMPLOYMENT	224	243	250
VOCATIONAL SCHOOL	49	46	45
JUNIOR COLLEGE	44	36	30
COLLEGE OR UNIVERSITY	19	17	18
APPRENTICESHIP	5	3	5
OTHER EDUCATION	10	11	10
OTHER ACTIVITY	2	5	3

Present Employment Activity

Information on present employment activity was presented for males, females and the total group for several characteristics. This section of the report describes all former students who indicated they were employed or seeking employment. Employment activity was sub-divided into four categories: unemployed, homemaker, military (full time) and paid employment. An individual could be involved in one or more of these activities at the present time (i.e. homemaker and paid employment). Unemployed included those who did not have paid employment but were seeking it. Homemakers were those working at maintaining a household. Military (full time) included those who were in the military service full time. Those working for pay were included in the category paid employment.

If the individual indicated that he or she had paid employment, they were asked for further information about the employment. The first additional information summarized was time status--whether they were employed full time (30 or more hours per week) or part time (less than 30 hours per week). The second piece of information reported, relatedness, refered to the relationship between the type of employment had and the high school courses taken. This information was provided for only those individuals in the group which the report summarized who were enrolled in at least one state reimbursed vocational education course (unless the school's project director included others). The third type of information about present paid employment summarized the geographic location of the employment in terms of each economic region in Minnesota and other states. A map of the economic regions in Minnesota is given in Appendix III.

Present Educational Activity

Information about present educational activity was presented for males, females and total group for several characteristics. Present educational activity was sub-divided into five types of education: vocational school, junior college, college or university, apprenticeship, and other education. Vocational school was intended to include those enrolled in both public and private post secondary vocational schools or institutes. Junior college included those enrolled in two year public or private junior colleges. College or university included those enrolled in four year public or private colleges or universities. Those enrolled in apprenticeship programs were summarized in the category called apprenticeship. If the individual was involved in educational activities not included in any one of the above described categories he was asked to categorize himself under "other education" and specify the type.

Present educational activity was next reported in terms of relatedness to high school courses taken. As for present employment activity, this information was provided for only those individuals in the group which the report summarized who were enrolled in at least one state reimbursed vocational education course (unless the school's project director included others).

Time status for present educational activity indicated whether the individual was engaged in the activity full-time or part-time. Full-time was defined

as being enrolled for 19 or more hours per week for a student attending a vocational school and 13 or more hours per week for a student attending a junior college, college or university. Students were classified as part time if they were enrolled in a vocational school for 18 or fewer hours per week or in a junior college, college or university for 12 or fewer hours per week.

The type of school in which the former student was enrolled at present was classified into public and private. The number in each type of school was reported.

As with present employment activity, the geographic location of the school in which the former student was enrolled was described in terms of the eleven economic regions in Minnesota and other states.

Other Activity

The heading, other activity, was used to categorize the present activities of former students which were not related to employment or education. This category contains individuals who were involved in activities such as vacations or long term illnesses.

Present Job

The present job section of the report for a group summarized the types of employment held by those who were working at paid employment part-time or full-time in terms of the occupation and industry in which they were employed. The occupational groups were professionals, managers, sales, clerical, craftsmen, operatives, laborers, farmers, and service. The industry groups were agriculture, fisheries and forestry, mining, construction, manufacturing, transportation, communications and public utilities, wholesale and retail trade, finance, insurance and real estate, business and repair services, personal service, entertainment and recreation, professional related services and public administration services. The report contained separate sections for females, males and total.

Recent History

The section on recent history described the activities of former students over a period of time. The time period was divided into three parts, the length of each part depending on the length of time since the students left the high school. It could be used to study the change in activities of former graduates since they left school. The activities which are categorized are unemployed, homemaker, military, paid employment, vocational school, junior college, college or university, apprenticeship, other education and other activity. An individual

could be involved in more than one activity at any one time (i.e. paid employment and vocational school). An example of the time periods for those followed up one year after leaving school was:

First period -- September-November
Second period -- December-February
At present -- March or April

Summary

This chapter of the report has presented a summary of the procedure developed to conduct an assessment of former high school students. The previous section presented an explanation of the forms required for the assessment. After these forms and the procedure were complete, they were pilot tested in order to evaluate whether or not they met the criteria set forth in Chapter I. The results of the pilot test are presented in the next chapter.

CHAPTER IV

PILOT TEST OF ASSESSMENT PROCEDURE

In order to evaluate the assessment procedures described in previous chapters of this report, a pilot test was conducted in six different Minnesota school districts. The criteria stated in Chapter I which formed the bases on which the procedure and forms were developed served as the evaluation criteria. These criteria in question form were:

1. Did the procedure provide information useful in assisting local school personnel in planning and evaluation?

2. Could the procedure be largely directed, conducted and financed by the local schools?

3. Were all school leavers included in the assessment population?

4. Did the procedure provide valid and reliable status information about the educational and employment activities of former students?

5. Would the procedure produce a high rate of response from former students?

6. What was the cost of implementing the procedure?

7. Would the procedure supply information which would simplify future assessment of the same students?

8. Did the procedure provide consistent information across schools?

Sample

The schools participating in the pilot test of the procedure were chosen from a list of schools that had indicated an interest to the State Department of Education. The following three criteria were used in selecting the schools:

1. Represent different sizes of districts (as measured by total number of graduates per year)

2. Represent different geographic area of the State

3. Willing to finance conducting the assessment study

The school districts chosen for the pilot test were: (1) Independent School District number 11 in Anoka, (2) Independent School District number 834 in

Stillwater and (3) the four independent school districts which were associated with the Southern Minnesota Vocational Center District.

Independent School District 11 served the communities of Anoka, Coon Rapids and Blain, Minnesota. The District had two existing high schools: Anoka Senior High and Coon Rapids Senior High which, in combination, graduated approximately 1300 students per year. The District was one of the largest in the State and was located in economic region 11. Some parts of the District may be considered a close suburb of Minneapolis and St. Paul.

Independent School District 834 served the community of Stillwater, Minnesota, a city also located in economic region 11. However, Stillwater was approximately 25 miles east of the Minneapolis-St. Paul area and was generally not considered a suburb of the Twin Cities. The District had one high school, Stillwater Senior High, which graduated approximately 450 students per year.

Southern Minnesota Vocational District was one of the secondary vocational center districts designed to provide vocational education to students from several independent school districts. The school districts served by this vocational district included: (1) Alden-Conger, (2) Freedom, (3) Kiester-Walters and (4) Wells-Easton. The high schools in each of these districts graduated between 40 and 130 students per year. The vocational district was located in economic region 10, approximately 120 miles south of the Minneapolis-St. Paul area.

In summary, the school districts selected for the pilot test were located in different geographic areas of the State and were different relative to size of student population. Each school district also agreed to finance the cost of testing the assessment procedure on their former students.

Method

An attempt was made to conduct the pilot test of the assessment procedure under conditions which would least represent an experimental or special situation. Efforts were made to have the school districts treat the assessment procedure as a part of their regular on-going activities and expenses.

The Minnesota Research Coordinating Unit for Vocational Education developed and supplied each school with a manual for implementing the assessment procedure, associated forms and materials and conducted (1) a workshop on the use of the procedure and forms and (2) a summary meeting with school personnel to discuss the procedures, costs and results of the assessment. In addition, the Research Coordinating Unit (1) made available a computer program to summarize the data collected and (2) did trouble-shooting on problems encountered by the local schools.

Each local school had the responsibility of providing a project director and clerical assistant to conduct the assessment. This staff identified the group of former students to be assessed, completed the assessment procedure for

this group and kept a record of the activities, costs and problems encountered during the study.

The pilot test of the secondary school assessment procedure was carried out in four steps. The first step was preparation for the pilot test. This step was accomplished by conducting a workshop in which the local directors and local clerical assistants were familiarized with the assessment procedures and instruments. This workshop was held in January and lasted one day.

The second and third steps, conduct of the assessment and local process evaluation, respectively, were completed simultaneously during the months February through May. Both of these steps were conducted completely by the local school district personnel; staff from the Minnesota Research Coordinating Unit for Vocational Education were available to answer questions about the assessment process. The second step involved implementing the assessment procedure previously presented in this report. The third step, local process evaluation, was intended to permit the local school personnel involved in the pilot test to make comments and recommendations about the procedures as they worked through them. To accomplish this objective, each individual involved completed a procedures diary in which they recorded the following information:

(1) Problems encountered
(2) Time spent on different tasks
(3) Expenses incurred
(4) Recommendations and comments

The fourth step of the pilot test was a summary evaluation of the procedure which was conducted at the completion of the pilot test by the Research Coordinating Unit. The RCU also directed the development of a computer program which would summarize the follow-up data for each school. This program was written and operated at the St. Paul Campus Computer Center at the University of Minnesota.

Results

The results of the pilot test of the assessment procedure are presented below as they relate to the questions stated at the beginning of this chapter.

1. Did the procedure provide information useful in assisting local school personnel in planning and evaluation?

Due in part to the lack of time since the local school personnel received the final reports of the pilot test, a complete answer to this question was not possible. However, some immediate uses for the data were made by the local schools. These were: (1) use the data as summary information to inform local school boards and parents about the employment and educational status of former students, (2) use the data to identify job opportunities available to high school leavers so that guidance materials could be prepared and (3) use the information to describe where students were going geographically after leaving high school.

It is anticipated that further uses will be identified after local school personnel have more time to inspect the assessment reports. The schools involved in the pilot test will be contacted again after the start of the next school year and again asked how they had or would use the assessment information in their planning and evaluation.

2. Could the procedure be largely directed, conducted and financed by the local school?

The follow-up procedure was designed to be a self contained and self sufficient procedure. That is, after the initial training workshop the local project personnel were to be able to conduct the assessment with minimum assistance from the Research Coordinating Unit.

During the pilot test it was found that the procedure was largely self sufficient. The local school personnel were able to conduct all parts of the procedure except computer analysis without excessive help of the Research Coordinating Unit.

Although on-site visits were made to each school, no significant problems were encountered by the local project staff. Problems which did arise were minor interpretation problems which could be answered on the telephone.

The local schools did need assistance to obtain computer analysis of the assessment data. This was primarily because the analysis was conducted at a university facility and could be more efficiently arranged and conducted by the Research Coordinating Unit.

3. Were all former students included in the assessment population?

The assessment procedure was designed to assess all former high school students regardless of the high school program taken (i.e. vocational, general, college preparatory). Each of the school districts participating in the pilot test assessed their total group of former students. All schools assessed the educational and employment status of the class of 1972 and the schools associated with the Southern Minnesota Vocational Center also included the class of 1969.

4. Did the procedure provide valid and reliable status information about the educational and employment activity of former students?

Inspection of the final reports for the schools involved revealed that the procedure did supply information about the status of former students relative to their post-high school educational and/or employment activity. In addition, information was summarized concerning the geographic location of former students and a brief history of their activities since leaving school.

The major sources of error in validity and reliability for the information could be: (1) not having responses from the complete group being assessed, (2) former students not answering the questions accurately (for several reasons) and (3) clerical staff not coding the responses correctly. Because of the high rate of response obtained which is documented in the answer to the next question, the error due to not having a response from everyone in the group being assessed was assumed to be very small. Error in information due to respondents not completing the form accurately was not directly assessed. However, very few questionnaires were incomplete or had inconsistent responses which indicated that directions for completing the follow-up questionnaire were understood and that the respondents made some effort to accurately complete the questions asked.

Error caused by incorrect coding by clerical staff was found to be relatively infrequent. The coding required may be thought to be composed of three processes. The first process was one of transferring information such as exit status or sex from a permanent student record card from the files at the school to the Base Information Form. This process is one of checking appropriate spaces on the form. The second process is an interpretative process and required that a judgement be made before an item was coded. For example, a judgement about the student's educational program (was it vocational, non-vocational or combination) had to be made before this item was coded on the Base Information Form. This process was also required to code items which appeared on the Follow-Up Questionnaire. For example, if the student took primarily vocational courses, a judgement had to be made about the relatedness of post high school activity to high school vocational program. The final process was one of checking appropriate spaces on the Base Information Form to indicate the status of the assessment procedure in getting a response from a particular former student.

In an attempt to assess the reliability of the coding, a special computer program was written. The primary error detected by this computer program was one of omission. That is, items that were to be coded were left uncoded on the forms. This type of error was detected most often in the procedure status section of the Base Information Form. An inspection of this section of the form and the directions for its completion indicated that the error was more the fault of form than the person doing the coding. With the exception of the procedure status section this type of error occurred relatively infrequently.

The second most frequent type of error was a transposition of copy error. This error resulted when code numbers were either miscopied or the positions of numerals were transposed when written on the forms. Again, relative to the large number of items coded these errors may be considered infrequent. However, the use of numbers with less than the seven digit U.S. Office of Education cluster codes used in the pilot test may reduce this type of error.

The validity of the coding, that is, were the items on both the Base Information Form and the Follow-Up Questionnaire coded in accordance with the directions in the procedures manual, was checked by visually inspecting a sample of the coded forms. It was determined from this inspection that the information was validly coded.

In summary, it was concluded that the information collected by the assessment procedure had sufficient validity and reliability to make it useable. Minor modification of the assessment forms and coding procedure would eliminate most of the existing sources of coding errors.

5. Would the procedure produce a high rate of response from former students?

In order to maximize the usefulness of the data collected by the assessment procedure, a goal of 80% questionnaire return rate was set for the pilot test. As can be seen in Table 1, this goal was exceeded by all school districts participating in the pilot test. Also shown in Table 1 are the numbers and percent of returns achieved at each stage of the assessment procedure.

In general, the first mailing of the questionnaire elicited between 39% and 50% return while the second mailing resulted in an additional return of between 26% and 31%.

The third stage of the procedure, telephone calls to all remaining non-respondents, accounted for between 11% and 23% additional returns. However, since the information requested on the questionnaire was descriptive in nature, any person with a knowledge of the non-respondent's post-high school activities could respond to telephone calls. For example, responses were accepted from parents, brothers, or sisters and wives or husbands. It was concluded that the follow-up procedure would produce the required 80% questionnaire return.

TABLE 1

Number and Percent of Returns by Stage

	Total in Population	Returns							
		1st Mailing		2nd Mailing		Phone Calls		Total	
		#	%	#	%	#	%	#	%
Anoka	1323	586	44.3	349	26.4	303	22.9	1238	93.6
Stillwater	541	213	39.4	166	30.6	62	11.5	441	81.5
Southern Minnesota Vocational Center	507	256	50.5	159	31.4	92	18.1	507	100.0
TOTAL	2371	1055	44.5	674	28.4	457	19.3	2186	92.2

6. What was the cost of implementing the procedure?

One responsibility of the local school was to keep a record of all costs incurred by the assessment project. A summary of these costs by major cost factor is shown in Table 2.

TABLE 2

Costs of Assessment Procedure

Cost Factor	School District		
	Anoka-Hennepin	Stillwater	Southern Minnesota Vocational District
Supplies	$ 367.83	$ 152.05	$ 107.98
Clerical Assistant	667.00	418.90	224.00
Project Director	35.00	45.00	220.00
Telephone	0	0	14.00
Computer Analysis	221.85	111.51	247.01
TOTAL	$1,291.68	$727.46	$812.99
Cost per Student	$.98 (1323 students)	$1.34 (541 students)	$1.60 (507 students)

As can be seen in Table 2, the cost per student ranged from $.98 for the Anoka-Hennepin School District to $1.60 for the Southern Minnesota Vocational District.

Most of the cost factors were directly related to the number of students assessed (i.e. supplies, clerical assistant, computer analysis). For example, as the number of students increased more money was spent on postage and stationary thus raising the total cost of supplies. Likewise, as the number of students was increased the clerical time required to complete the procedure was increased. Another cost factor which appeared to be related to number of students was computer analysis, although in this case the cost factor was also influenced by the number of final reports prepared by computer. For example, the Stillwater district received one report for its one high school while the Southern Minnesota Vocational District, which followed-up about the same number of students, received ten reports; two reports (one for the class of 1969 and one for the class of 1972) for each of the four school districts and a summary of all districts.

The primary exception to this direct cost factor-student relationship was the cost of the project director. As seen in Table 2 the cost of the project directors' time for the Anoka-Hennepin and Stillwater districts was small while for Southern Minnesota Vocational District this cost factor was relatively large. This difference in project director cost can be explained by reviewing the amount of time spent on implementing the assessment procedure which is shown in Table 3.

TABLE 3

Time Spent on Follow-Up Project by Position and Procedure Stage

Stage \ Position	Anoka		Stillwater		Southern Minnesota Vocational Center	
	Clerical	Director	Clerical	Director	Clerical	Director
Workshop	8.0	8.0	8.0	8.0	8.0	8.0
Base Information	65.0	2.0	44.5	3.0	32.0	4.0
First Mailing	53.0	0	30.0	0	5.0	2.0
Second Mailing	33.0	0	30.0	0	5.0	2.0
Questionnaire Coding	96.0	1.5	50.5	1.5	32.0	2.0
Telephoning	35.0	0	44.0	0	34.0	12.0
TOTAL	290.0	11.5	207.0	12.5	128.0	30.0

As indicated in Table 3, the time involvement of the project directors at both Anoka and Stillwater was minimal. These individuals were directly involved only during the base information and questionnaire coding stages of the procedure. According to comments received from the directors, this time was primarily spent answering questions relative to the classification of student programs and answering questions from the general public about the nature of the assessment study.

The project director for the schools associated with the Southern Minnesota Vocational Center had a much larger time investment than did the directors in the other two districts. There were several reasons for this greater involvement. First, the clerical assistant was removed from the project during the telephoning stage to complete other duties in the local school district and the project director completed the final stages of the assessment procedure. Second, the assessment was conducted for four independent school districts, which complicates the coordination of the procedure. Third, the district decided to assess two separate groups of students; the graduates of 1972 and the graduates of 1969. Fourth, the high rate of return (100%) necessitated a larger number of contacts to non-respondents.

Since the procedure was to be made as inexpensive as possible, it required most of the implementation to be carried out by clerical staff. Success at meeting this requirement is borne out by the "total" row of Table 3. Also note from Table 3 that the clerical time needed for the first and second mailing stages was considerably less in the Southern Minnesota district. The primary explanation for this was that the Model Office Class at the Vocational Center prepared the questionnaires, cover letters and envelopes for these mailings, thus reducing clerical time needed for these steps.

Another factor relating to the time involvement of clerical assistants and directors appeared to be the status of the clerical assistant. For example, the assistant in the Anoka district was hired specifically for the follow-up project with no other duties for the school system. The assistant in the Stillwater district was assigned to the project as part of her regular duties in the district. And the assistant at the Southern Minnesota district was assigned to the project in addition to her regular part time duties for one of the schools within the district and was removed from the project prior to its completion. It would appear that either of the first two cases would be best for minimizing the time required from the project director.

7. Would the procedure supply information which would simplify future assessments of the same students?

Since only status information was collected in the present assessment, it was desirable that this process also provide information which would facilitate future assessments of these same students for other types of information. For example, a school might want to assess the "attitudes toward work" of a specific subgroup of the original follow-up population. As a means of facilitating future contacts with the former students, the present assessment procedure was designed to obtain the following information:

(1) Most recent address and telephone number
(2) Address of employer (if employed)
(3) Name of immediate supervisor (if employed)
(4) Address of post-secondary education institution (if going to school)

8. Did the procedure provide consistent information across schools?

Since all schools agreed to use the same follow-up questionnaire, the information gathered was consistent across schools. All reports were also consistent except for those in which the local school was given the opportunity to define the subgroups for which the reports were prepared (i.e. local vocational programs, special interest groups).

Summary

In summary, a procedure to assess the educational and employment status of former high school students was pilot tested in six Minnesota high school districts. The pilot test was conducted to determine the degree to which a set of pre-specified criteria were met by the procedure.

In general, it was found that the assessment procedure met each of the criteria. The procedure provided valid and reliable status information about the educational and employment activities of former students. The information was already being used by the local schools. The procedure resulted in a return

rate over the required 80% for all schools involved. It was concluded that the procedure could be implemented by clerical staff under minimal direction of a project director. The cost of assessment varied from 98 cents to one dollar and 60 cents per student assessed. Total costs per school were almost directly related to size of the group being contacted. By obtaining updated name and location information, the procedure would facilitate future assessments of the former students involved in the pilot test populations. Since the same forms were used in all schools, the information reported was consistent between schools which would facilitate summary reporting for groups of school districts.

CHAPTER V

RECOMMENDATIONS

Based on the results of the pilot tests of the assessment procedure, the list of recommendations presented below was formulated. These suggestions are being used as the basis for revision of the forms and procedure for further implementation. The suggested modifications are listed by procedure stage to which they relate.

Stage 1: Collecting Base Information

1. Each vocational cluster taken by the student be identified on the Base Information Form rather than just the cluster in which the student completed the greatest number of courses. This change would allow the data summary to more closely represent data needed for completion of state and federal reports.

2. Wherever possible, code numbers be reduced from the nine digit O.E. code to two digits. This change should help eliminate existing errors in coding.

3. The procedure status section of the Base Information Form be revised and simplified to allow a better summary of the steps in completing the assessment procedure for a given student.

Stage 2: Preparation and Mailing and Stage 3: Questionnaire Return

Place more emphasis on the importance of adhering to the directions. That is, the local school personnel should be made more aware of the importance of each step as it is presented in the procedures manual.

Stage 4: Non-Respondents

1. The procedure for preparing the second mailing of the questionnaire be changed so that this mailing is ready to mail within two weeks of the date of the first mailing.

2. Emphasize that the time between 6:00 p.m. and 9:00 p.m. is a good time for contacting non-respondents by telephone.

Stage 5: Coding, Stage 6: Preparation for Data Summarizing, Stage 7: Hand Summarizing and Stage 8: Data Reports

1. Emphasize the need for accuracy and completeness in the coding of the data. This step becomes extremely important as the system becomes more self sufficient and the local schools handle the data processing step.

2. Information contained on the Base Information Form and the Follow-Up Questionnaire be transferred to a single form to insure completeness in coding and simplify keypunching and data analysis.

3. The format of the final report be studied relative to changes which may make them more useful to the local school personnel.

Administration of the Procedure

1. The clerical assistant be hired specifically for the assessment project without other assigned duties for the school. This allows the assistant to devote the effort necessary to do a complete and thorough job within the time constraints established by the procedure.

2. During the training workshop, the local project personnel must be made aware that the procedure is designed to obtain the maximum return possible and it should be followed as closely as possible.

The above recommendations will form the basis for modification of both the forms and procedure used to conduct a second test and demonstration of the assessment procedure. During the second test, emphasis will be placed on making the forms and procedures even more accurate and self-sufficient for a local school wishing to conduct an assessment of the employment and educational status of its former students.

APPENDIX I

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APPENDIX II

Potential Groups for Which Summaries Could Be Made

ALL STUDENTS - Contains a report of all students included in the follow-up study (i.e. graduates, drop-outs, and early leavers).

STUDENTS ENTERING 10TH GRADE - Includes a summary of all students who were present at the start of the school year that his/her class was the school's 10th grade class. These students attended the school from the 10th grade until they left.

STUDENTS ENTERING AFTER 10TH GRADE - Includes a summary of all students who entered your school after the 10th grade.

STUDENTS THAT GRADUATED - Summary of information on students who received a diploma from the high school.

STUDENTS THAT DROPPED-OUT - Includes students who left the high school without a diploma and did not continue his/her education at another high school.

STUDENTS THAT LEFT FOR OTHER REASONS - Summary for students who left the high school without a diploma but were not classified as drop-outs or did not transfer to other high schools.

HANDICAPPED STUDENTS - Summary for those students who were handicapped in some way as identified by your school. Handicapped persons might include those who are mentally retarded, hard of hearing, deaf, partially sighted, blind, speech impaired, seriously emotionally disturbed, and physically impaired.

DISADVANTAGED STUDENTS - Includes those students who were disadvantaged in some way as identified by your school. Indicators of disadvantagement might be low level of family income, low level of educational attainment, racial minorities, and persons on welfare.

STUDENTS IN NON-VOCATIONAL STATE EDUCATION PROGRAMS - Summary for all students who had no state reimbursed non-vocational courses in the 11th or 12th grade.

STUDENTS IN COMBINATION STATE EDUCATION PROGRAMS - Summary for all students who had at least one state reimbursed vocational education course in the 11th or 12th grade but whose majority of elective courses were non-vocational.

STUDENTS IN VOCATIONAL STATE EDUCATION PROGRAMS - Includes all students who had a majority of their elective courses in grades 11 and 12 as state reimbursed vocational education courses.

STUDENTS IN STATE DEFINED VOCATIONAL EDUCATION PROGRAMS (COMBINATION AND VOCATIONAL) - Includes all students who were enrolled in at least one state reimbursed vocational education program in either the 11th or 12th grade. This report should be helpful in completing state reports concerning school leavers who had been enrolled in state reimbursed vocational education programs.

STUDENTS IN O.E. CLUSTERS - Includes those students enrolled in a state reimbursed vocational education course categorized by the Minnesota Department of Education into a specific Office of Education cluster in the 11th or 12th grade. Each cluster represents a group of related occupations for which a particular vocational course provides job entry preparation. Each cluster is assigned a code for reporting purposes. The clusters used in this state are: accounting-data occupations (03.001), agribusiness occupations (01.000), agriculture production occupations (01.0100), air transportation occupations (17.0400), audio-visual occupations (04.0088), building trades occupations (17.1000), child care and education occupations (09.0201), community service occupations (15.0000), consumer homemaking (09.0100), electricity-electronics occupations (10.0400), entertainment occupations (03.4400), environment occupations (01.0600), fashion and apparel occupations (09.0202), foods occupations (09.0203), health o-cupations (07.0000), hotel-motel-housing occupations (09.0204), insurance and finance occupations (03.0000), journalism occupations (05.0403), land transportation occupations (10.1604), marine occupations (13.0200), metal working occupations (17.2300), office occupations (14.0000), personal service occupations (04.1700), recreation and tourism occupations (04.1800), sales and marketing occupations (04.0000), and science related occupations (13.0000). A provision was also made to add new clusters if the school wished. As noted earlier, the school may not offer vocational courses in all of these clusters. This report should be helpful in completing state reports concerning specific reimbursed vocational education courses. If a student was enrolled in courses in two or more clusters he was categorized into the cluster where he spent most time or, in the case of equal amounts, into the cluster which was studied last.

STUDENTS IN NON-VOCATIONAL LOCAL EDUCATION PROGRAMS - Summary of students who had no courses in the 11th or 12th grade which were defined by the local school as being vocational education.

STUDENTS IN COMBINATION LOCAL EDUCATION PROGRAMS - Includes students who had at least one course which was defined by the local school as being vocational education in the 11th or 12th grade but whose majority of elective courses were non-vocational.

STUDENTS IN VOCATIONAL LOCAL EDUCATION PROGRAMS - Includes students who had a majority of their elective courses in grades 11 or 12 as courses which were defined as vocational education by the local school.

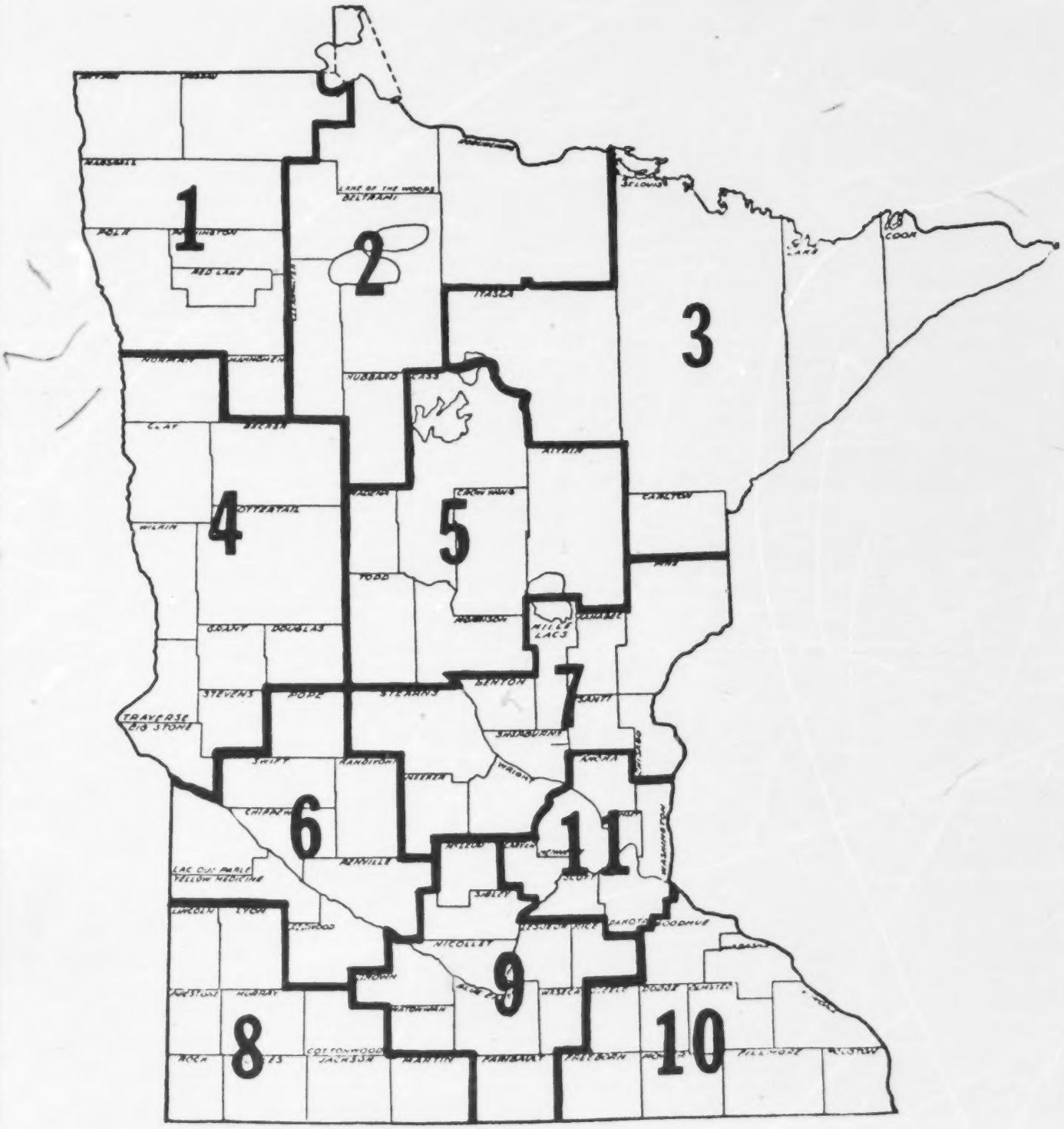
STUDENTS IN LOCAL DEFINED VOCATIONAL EDUCATION PROGRAMS (COMBINATION AND VOCATIONAL) - Includes students who were enrolled in at least one course which was defined as vocational education by the local school in either the 11th or 12th grade.

STUDENTS IN LOCAL PROGRAMS - Includes students enrolled in particular vocational courses which have been categorized into programs by your school. A report is produced for each program so defined. Consult your project director for documentatio of how each program was defined.

STUDENTS IN SPECIAL INTEREST PROGRAMS - Includes students categorized into special interest groups. A report is produced for each special interest group which was defined.

APPENDIX III

Minnesota Economic Regions



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